

NASA/TM-1998-206936



# NASA Langley Scientific and Technical Information Output—1997

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National Aeronautics and  
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February 1998

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## Preface

This report contains a listing of the NASA Langley Research Center's publicly available scientific and technical research output for C.Y. 1997.

The intent of this report is to provide a greater awareness of the broad scope of results and the importance of the research and development work conducted by scientists and engineers at Langley. This current awareness is mandated by the National Aeronautics and Space Act of 1958, which provides for the widest practical dissemination of NASA research.

During C.Y. 1997, Langley's contributions to NASA and non-NASA literature included 60 NASA Formal Reports, 13 Conference Publications, 77 High-Numbered Technical Memorandums, 172 Contractor Reports, 174 Journal Articles and Book Publications, 426 Meeting Presentations, 34 Technical Talks, and 31 Patents.



## **Introduction**

The NASA Langley Research Center is one of the Nation's leading laboratories for research and development in the sciences of aeronautics and space technology. Langley conducts basic and applied research in the areas of Airframe Systems, Aerodynamics, Atmospheric Science, and Structures and Materials.

This document contains a bibliography of Langley's publicly available scientific and technical research output for 1997 which is processed through the Center's Information Systems and Services Division, an integral part of NASA's Agency-wide Scientific and Technical Information (STI) system. The results of Langley's research are disseminated in a variety of NASA and non-NASA scientific and technical media and information systems. This document is intended to be a reference summary for researchers and a current awareness publication for the scientific, research, and academic community. Details of the availability of the research references in this document are found in the section, "Availability," on page vii.

Many Langley reports are available electronically on the Langley Technical Report Server (LTRS) at <http://techreports.larc.nasa.gov/ltrs/ltrs.html> or the Institute for Computer Applications in Science and Engineering (ICASE) Technical Report Server (ITRS) at <http://www.icase.edu/docs/library/itrs.html> via the World Wide Web (WWW). The relative Uniform Resource Locators are noted below citations for reports available electronically.

The citations are grouped by the Scientific and Technical Aerospace Reports (STAR) subject categories and listed alphabetically by author or innovator. The Langley organization to which the senior author or innovator is assigned and the Research and Technology Objectives and Plans (RTOP) number are noted below citations when appropriate and included in the indexes.

Patents listed are those which were issued in 1997 and owned by Langley Research Center.

Publication of some journal articles was not known at press time for the 1996 issue of this document. These articles are therefore listed in the 1997 issue.



## **Availability**

<b><u>Category</u></b>	<b><u>Source</u></b>
NASA Reports	NASA Center for AeroSpace Information (CASI) 800 Elkridge Landing Road Linthicum Heights, MD 21090-2934 (301) 621-0390
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## **Contents**

Preface . . . . .	iii
Introduction . . . . .	v
Availability . . . . .	vii

## **Aeronautics**

Category 01 Aeronautics (General) . . . . .	1
Category 02 Aerodynamics . . . . .	2
Category 03 Air Transportation and Safety . . . . .	10
Category 04 Aircraft Communications and Navigation . . . . .	12
Category 05 Aircraft Design, Testing and Performance . . . . .	12
Category 06 Aircraft Instrumentation . . . . .	17
Category 07 Aircraft Propulsion and Power . . . . .	18
Category 08 Aircraft Stability and Control . . . . .	19
Category 09 Research and Support Facilities (Air) . . . . .	20

## **Astronautics**

Category 13 Astrodynamics . . . . .	21
Category 15 Launch Vehicles and Space Vehicles . . . . .	22
Category 16 Space Transportation . . . . .	22
Category 17 Space Communications, Spacecraft Communications, Command and Tracking . . . . .	23
Category 18 Spacecraft Design, Testing and Performance . . . . .	24

## **Chemistry and Materials**

Category 23 Chemistry and Materials (General) . . . . .	.27
Category 24 Composite Materials . . . . .	.27
Category 25 Inorganic and Physical Chemistry . . . . .	.35
Category 26 Metallic Materials . . . . .	.35
Category 27 Nonmetallic Materials . . . . .	.40
Category 28 Propellants and Fuels . . . . .	.46
Category 29 Materials Processing . . . . .	.46

## **Engineering**

Category 31 Engineering (General) . . . . .	.46
Category 32 Communications and Radar . . . . .	.47
Category 33 Electronics and Electrical Engineering . . . . .	.48
Category 34 Fluid Mechanics and Heat Transfer . . . . .	.50

Category 35 Instrumentation and Photography . . . . .	.58
Category 36 Lasers and Masers . . . . .	.60
Category 37 Mechanical Engineering . . . . .	.61
Category 38 Quality Assurance and Reliability . . . . .	.61
Category 39 Structural Mechanics . . . . .	.62

## **Geosciences**

Category 43 Earth Resources and Remote Sensing. . . . .	.67
Category 45 Environment Pollution . . . . .	.68
Category 46 Geophysics . . . . .	.69
Category 47 Meteorology and Climatology . . . . .	.76

## **Life Sciences**

Category 52 Aerospace Medicine . . . . .	.83
--	-----

## **Mathematical and Computer Sciences**

Category 59 Mathematical and Computer Sciences (General) . . . . .	.84
Category 60 Computer Operations and Hardware . . . . .	.85
Category 61 Computer Programming and Software . . . . .	.89
Category 62 Computer Systems. . . . .	.90
Category 63 Cybernetics . . . . .	.91
Category 64 Numerical Analysis . . . . .	.91
Category 65 Statistics and Probability. . . . .	.96
Category 66 Systems Analysis . . . . .	.96

## **Physics**

Category 70 Physics (General) . . . . .	.96
Category 71 Acoustics . . . . .	.97
Category 72 Atomic and Molecular Physics . . . . .	106
Category 73 Nuclear and High-Energy Physics . . . . .	107
Category 74 Optics . . . . .	108
Category 76 Solid-State Physics . . . . .	108

## **Social Sciences**

Category 81 Administration and Management . . . . .	111
Category 82 Documentation and Information Science. . . . .	111

## **Space Sciences**

Category 92 Solar Physics . . . . .	114
Category 93 Space Radiation . . . . .	114

## **General**

Category 99 General . . . . .	115
Author Index . . . . .	117
Organization Index. . . . .	133
RTOP Index . . . . .	137



## **Scientific and Technical Publications**

## Aeronautics

## **Category 01 Aeronautics (General)**

- 1** Abel, I.: Research and Applications in Structures at the NASA Langley Research Center. NASA TM-110311, January 1997, 26 p.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/tm/NASA-97-tm110311.ps.Z>  
Organization DS RTOP 522-32-21
  - 2** Abel, I.: Research and Applications in Structures at the NASA Langley Research Center. Presented at 37th Israel Annual Conference on Aerospace Sciences, February 26-27, 1997, Tel Aviv, Israel. In Proceedings, p. VII-1-XXV-25.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/tm/NASA-97-tm110311.ps.Z>  
Organization DS RTOP 522-32-21
  - 3** Burn, M.; Carey, J.; Czech, J.; and Wingrove, E. R., III: The Flight Track Noise Impact Model. (NAS2-14361 Logistics Management Institute.) NASA CR-201683, April 1997, 45 p.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/cr/NASA-97-cr201683.ps.Z>  
Organization KC RTOP 538-08-11
  - 4** Holmes, B. J.: (Re)inventing Government—Industry-University R&D Collaboration. Presented at SAE General, Corporate, and Regional Aviation Meeting and Exposition, April 29–May 1, 1997, Wichita, Kansas.  
Organization KC RTOP 538-07-22
  - 5** Horvath, T. J.; and Hannemann, K.: Blunt Body Near Wake Flow Field at Mach 10. Presented at 35th AIAA Aerospace Sciences Meeting and Exhibit, January 6-9, 1997, Reno, Nevada. AIAA Paper No. 97-0986.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/aiaa/NASA-aiaa-97-0986.ps.Z>  
Organization DA RTOP 242-80-01
  - 6** Kaplan, B. J.; Lee, D. A.; Retina, N.; Wingrove, E. R., III; Malone, B.; Hall, S. G.; and Houser, S. A.: The ASAC Flight Segment and Network Cost Models. (NAS2-14361 Logistics Management Institute.) NASA CR-201679, April 1997, 198 p.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/cr/NASA-97-cr201679.ps.Z>  
Organization KC RTOP 538-08-11
  - 7** Lee, D. A.; Kostiuk, P. F.; Hemm, R. V.; Wingrove, E. R., III; and Shapiro, G.: Estimating the Effects of the Terminal Area Productivity Program. (NAS2-14361 Logistics Management Institute.) NASA CR-201682, April 1997, 106 p.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/cr/NASA-97-cr201682.ps.Z>  
Organization KC RTOP 538-08-11

- 8 Roberts, E.; and Villani, J. A.: ASAC Executive Assistant Architecture Description Summary. (NAS2-14361 Logistics Management Institute.) NASA CR-201681, April 1997, 191 p.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/cr/NASA-97-cr201681.ps.Z>  
Organization KC RTOP 538-08-11

9 Roberts, E.; Villani, J. A.; and Ritter, P.: Aviation System Analysis Capability (ASAC) Quick Response System (QRS) Test Report. (NAS2-14361 Logistics Management Institute.) NASA CR-201680, April 1997, 178 p.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/cr/NASA-97-cr201680.ps.Z>  
Organization KC RTOP 538-08-11

10 Wingrove, E. R., III; Johnson, J. P.; Sickles, R. G.; and Good, D. H.: The ASAC Air Carrier Investment Model (Second Generation). (NAS2-14361 Logistics Management Institute.) NASA CR-201678, April 1997, 77 p.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/cr/NASA-97-cr201678.ps.Z>  
Organization KC RTOP 538-08-11

## **Category 02 Aerodynamics**

- 11 Alter, S. J.: Surface Modeling and Grid Generation of Orbital Sciences X34 Vehicle (Phase I). (NAS1-96014 Lockheed Martin Engineering & Sciences Company.) NASA CR-97-206243, November 1997, 117 p.  
<http://techreports.larc.nasa.gov/ltrs/PDF/1997/cr/NASA-97-cr206243.pdf>  
Organization DA RTOP 242-80-01

12 Anderson, C. J.; Giuliano, V. J.; and Wing, D. J.: Investigation of Hybrid Fluidic/Mechanical Thrust Vectoring for Fixed-Exit Exhaust Nozzles. Presented at 33rd AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit, July 7-9, 1997, Seattle, Washington. AIAA Paper No. 97-3148.  
Organization DA RTOP 522-21-11

13 Anderson, W. K.; and Bonhaus, D. L.: Aerodynamic Design on Unstructured Grids for Turbulent Flows. NASA TM-112867, June 1997, 11 p.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/tm/NASA-97-tm112867.ps.Z>  
Organization DF RTOP 522-31-21

14 Anderson, W. K.; and Venkatakrishnan, V.: Aerodynamic Design Optimization on Unstructured Grids With a Continuous Adjoint Formulation. Presented at 35th AIAA Aerospace Sciences Meeting and Exhibit, January 6-9, 1997, Reno, Nevada. AIAA Paper No. 97-0643.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/97/NASA-aiaa-97-0643.ps.Z>  
Organization DF RTOP 505-59-53

- 15 Asbury, S. C.: Internal Performance of a Fixed-Shroud Nonaxisymmetric Nozzle Equipped With an Aft-Hood Exhaust Deflector. NASA TM-97-206255, November 1997, 75 p.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/tm/NASA-97-tm206255.ps.Z>  
Organization DA RTOP 522-25-31
- 16 Bartels, R. E.; and Edwards, J. W.: Cryogenic Tunnel Pressure Measurements on a Supercritical Airfoil for Several Shock Buffet Conditions. NASA TM-110272, September 1997, 14 p.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/tm/NASA-97-tm110272.ps.Z>  
Organization DS RTOP 522-22-21
- 17 Berry, S. A.; Bouslog, S. A.; Brauckmann, G. J.; and Caram, J. M.: Boundary Layer Transition Due to Isolated Roughness: Shuttle Results From the LaRC 20-Inch Mach 6 Tunnel. Presented at 35th AIAA Aerospace Sciences Meeting and Exhibit, January 6-9, 1997, Reno, Nevada. AIAA Paper No. 97-0273.  
Organization DA RTOP 242-80-01
- 18 Bibb, K. L.; Peraire, J.; and Riley, C. J.: Hypersonic Flow Computations on Unstructured Meshes. Presented at 35th AIAA Aerospace Sciences Meeting and Exhibit, January 6-9, 1997, Reno, Nevada. AIAA Paper No. 97-0625.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/aiaa/NASA-aiaa-97-0625.ps.Z>  
Organization DA RTOP 242-80-01
- 19 Blanchard, A. E.; Lachowicz, J. T.; and Wilkinson, S. P.: NASA-Langley Mach 6 Quiet Wind Tunnel Performance. *AIAA Journal*, Volume 35, No. 1, January 1997, p. 23-28.  
Organization DF RTOP 505-59-50
- 20 Blanchard, R. C.; Wilmoth, R. G.; and Moss, J. N.: Aerodynamic Flight Measurements and DSMC Simulations of Blunt-Body Mars Entry Vehicles. *Journal of Spacecraft and Rockets*, Volume 34, No. 5, September–October 1997, p. 687-690.  
Organization DA RTOP 242-80-01
- 21 Buning, P. G.: Chimera Grid Development for the Space Shuttle Launch Vehicle. Presented at Advances in Flow Simulation Techniques Conference, May 3-4, 1997, Davis, California.  
Organization DA RTOP 538-05-13
- 22 Carlson, J. R.: Applications of Algebraic Reynolds Stress Turbulence Models Part 2: Transonic Shock-Separated Afterbody. *Journal of Propulsion and Power*, Volume 13, No. 5, September–October 1997, p. 620-628.  
Organization DA RTOP 505-59-30
- 23 Carlson, J. R.: Applications of Algebraic Reynolds Stress Turbulence Models Part 1: Incompressible Flat Plate. *Journal of Propulsion and Power*, Volume 13, No. 5, September–October 1997, p. 610-619.  
Organization DA RTOP 505-59-30

- 24 Chen, F-J.: Application of Least-Squares Adjustment Technique to Geometric Camera Calibration and Photogrammetric Flow Visualization. Presented at ISA 43rd International Instrumentation Symposium, May 4-8, 1997, Orlando, Florida. In Proceedings, p. 659-668.  
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Organization DF RTOP 522-31-11

25 Cler, D. L.; Lamb, M.; Farokhi, S.; Taghavi, R. R.; and Hazlewood, R. N.: Application of Pressure-Sensitive Paint in Supersonic Nozzle Research. *Journal of Aircraft*, Volume 33, No. 6, November–December 1996, p. 1109-1114.  
Organization DA RTOP 522-25-31

26 Cockrell, C. E., Jr.; and McMinn, J. D.: Enhanced Control Effector Designs for Airbreathing Transatmospheric Vehicles. Presented at 35th AIAA Aerospace Sciences Meeting and Exhibit, January 6-9, 1997, Reno, Nevada. AIAA Paper No. 97-0297.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/97/NASA-aiaa-97-0297.ps.Z>  
Organization DA RTOP 505-70-62

27 Doggett, G. P.; Chokani, N.; and Wilkinson, S. P.: Effect of Angle of Attack on Hypersonic Boundary-Layer Stability. *AIAA Journal*, Volume 35, No. 3, March 1997, p. 464-470.  
Organization DF RTOP 522-31-11

28 Gatlin, G. M.; and McGhee, R. J.: Experimental Investigation of Semi-Span Model Testing Techniques. *Journal of Aircraft*, Volume 34, No. 4, July–August 1997, p. 500-505.  
Organization DA RTOP 538-05-14

29 Gile-Laflin, B. E.; Applin, Z. T.; and Jones, K. M.: Wind Tunnel Results of the Aerodynamic Performance of a 1/8-Scale Model of a Twin-Engine Transport With Multi-Element Wing. NASA TM-110304, March 1997, 128 p.  
Organization DA RTOP 538-05-14

30 Green, B. E.: An Approach to the Constrained Design of Natural Laminar Flow Airfoils. (NCC1-24 George Washington University, JIAFS.) NASA CR-201686, February 1997, 78 p.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/cr/NASA-97-cr201686.ps.Z>  
Organization DA RTOP 505-59-53

31 Green, B. E.; Whitesides, J. L.; Campbell, R. L.; and Mineck, R. E.: Method for the Constrained Design of Natural Laminar Flow Airfoils. *Journal of Aircraft*, Volume 34, No. 6, November–December 1997, p. 706-712.  
Organization DA RTOP 538-05-12

32 Huai, X.; Joslin, R. D.; and Piomelli, U.: Large-Eddy Simulation of Laminar-Turbulent Transition in a Swept-Wing Boundary Layer. Presented at 35th AIAA Aerospace Sciences Meeting and Exhibit, January 6-9, 1997, Reno, Nevada. AIAA Paper No. 97-0750.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/97/NASA-aiaa-97-0750.ps.Z>  
Organization DF RTOP 522-31-11

- 33** Hunt, J. L.; Laruelle, G.; and Wagner, A.: Systems Challenges for Hypersonic Vehicles. Presented at AGARD Interpanel Symposium on Future Aerospace Technology in Service to the Alliance, April 14-18, 1997, Paris, France.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/mtg/NASA-97-agard-jlh2.ps.Z>  
Organization LA RTOP 522-51-11
- 34** Hunt, J. L.; and McClinton, C. R.: Scramjet Engine/Airframe Integration Methodology. Presented at AGARD Interpanel Symposium on Future Aerospace Technology in Service to the Alliance, April 14-18, 1997, Paris, France.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/mtg/NASA-97-agard-jlh.ps.Z>  
Organization LA RTOP 522-51-11
- 35** Joslin, R. D.: Direct Numerical Simulation of Evolution and Control of Linear and Nonlinear Disturbances in Three-Dimensional Attachment-Line Boundary Layers. NASA TP-3623, February 1997, 39 p.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/97/NASA-97-tp3623.ps.Z>  
Organization DF RTOP 505-59-50
- 36** Joslin, R. D.: Discussion of DNS: Past, Present, and Future. Presented at First International Conference on Direct Numerical Simulation and Large Eddy Simulation (DNS/LES), August 4-8, 1997, Ruston, Louisiana. In Proceedings, Paper No. I-01.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/mtg/NASA-97-1icdns-rdj.ps.Z>  
Organization DF RTOP 522-31-11
- 37** Joslin, R. D.; Gunzburger, M. D.; Nicolaides, R. A.; Erlebacher, G.; and Hussaini, M. Y.: A Self-Contained, Automated Methodology for Optimal Flow Control. *AIAA Journal*, Volume 35, No. 5, May 1997, p. 816-824.  
Organization DF RTOP 505-59-10
- 38** Kennedy, C. A.; and Carpenter, M. H.: Comparison of Several Numerical Methods for Simulation of Compressible Shear Layers. NASA TP-3484, December 1997, 62 p.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/tp/NASA-97-tp3484.ps.Z>  
Organization DA RTOP 505-59-50
- 39** Klausmeyer, S. M.; and Lin, J. C.: Comparative Results From a CFD Challenge Over a 2D Three-Element High-Lift Airfoil. NASA TM-112858, May 1997, 50 p.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/tm/NASA-97-tm112858.ps.Z>  
Organization DF RTOP 522-11-51
- 40** Kleb, W. L.: Simulation of an Aerospace Vehicle Pitch-Over Maneuver. *Journal of Spacecraft and Rockets*, Volume 34, No. 2, March–April 1997, p. 254-256.  
Organization DA RTOP 242-20-08

- 41 Korte, J. J.; Dunn, H. J.; Salas, A. O.; Alexandrov, N.; Follett, W. W.; Orient, G. E.; and Hadid, A. H.: Multidisciplinary Approach to Linear Aerospike Nozzle Optimization. Presented at 33rd AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit, July 7-9, 1997, Seattle, Washington. AIAA Paper No. 97-3374.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/aiaa/NASA-aiaa-97-3374.ps.Z>  
Organization DF RTOP 522-31-31

42 Korte, J. J.; Salas, A. O.; Dunn, H. J.; Alexandrov, N.; Follett, W. W.; Orient, G. E.; and Hadid, A. H.: Multidisciplinary Approach to Aerospike Nozzle Design. NASA TM-110326, February 1997, 16 p.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/tm/NASA-97-tm110326.ps.Z>  
Organization DF RTOP 522-31-41

43 Korte, J. J.; Weston, R. P.; and Zang, T. A.: Multidisciplinary Optimization Methods for Preliminary Design. Presented at AGARD Interpanel Symposium on Future Aerospace Technology in Service to the Alliance, April 14-18, 1997, Paris, France.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/mtg/NASA-97-agard-jjk.ps.Z>  
Organization DF RTOP 505-63-50

44 Kumar, A.; Gnoffo, P. A.; Moss, J. N.; and Drummond, J. P.: Advances in Computational Capabilities for Hypersonic Flows. Presented at AGARD Interpanel Symposium on Future Aerospace Technology in Service to the Alliance, April 14-18, 1997, Paris, France.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/mtg/NASA-97-agard-ak.ps.Z>  
Organization DA RTOP 242-80-01

45 Lachowicz, J. T.; Chokani, N.; and Wilkinson, S. P.: Boundary-Layer Stability Measurements in a Hypersonic Quiet Tunnel. *AIAA Journal*, Volume 34, No. 12, December 1996, p. 2496-2500.  
Organization DF RTOP 522-31-11

46 Lin, J. C.; and Dominik, C. J.: Parametric Investigation of a High Lift Airfoil at High Reynolds Numbers. *Journal of Aircraft*, Volume 34, No. 4, July–August 1997, p. 485-491.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/jp/NASA-97-joa-jcl.ps.Z>  
Organization DF RTOP 505-59-50

47 Mitcheltree, R. A.; and Fremaux, C. M.: Subsonic Dynamics of Stardust Sample Return Capsule. NASA TM-110329, March 1997, 19 p.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/tm/NASA-97-tm110329.ps.Z>  
Organization DA RTOP 242-80-01

48 Mitcheltree, R. A.; Moss, J. N.; Cheatwood, F. M.; Greene, F. A.; and Braun, R. D.: Aerodynamics of the Mars Microprobe Entry Vehicles. Presented at AIAA Atmospheric Flight Mechanics Conference, August 11-13, 1997, New Orleans, Louisiana. AIAA Paper No. 97-3658.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/aiaa/NASA-aiaa-97-3658.ps.Z>  
Organization DA RTOP 242-80-01

- 49** Mitcheltree, R. A.; Wilmoth, R. G.; Cheatwood, F. M.; Brauckmann, G. J.; and Greene, F. A.: Aerodynamics of Stardust Sample Return Capsule. Presented at 15th AIAA Applied Aerodynamics Conference, June 23-25, 1997, Atlanta, Georgia. AIAA Paper No. 97-2304.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/aiaa/NASA-aiaa-97-2304.ps.Z>  
Organization DA RTOP 242-80-01
- 50** Penland, J. A.; and Hawkins, R.: Invariance of Hypersonic Normal Force Coefficients With Reynolds Number and Determination of Inviscid Wave Drag From Laminar Experimental Results. NASA TP-3673, December 1997, 65 p.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/tp/NASA-97-tp3673.ps.Z>  
Organization LA RTOP 505-70-63
- 51** Phillips, W. P.; and Engelund, W. C.: Aerodynamics for a Winged, Circular-Body, Single-Stage-to-Orbit Spacecraft Configuration. *Journal of Spacecraft and Rockets*, Volume 34, No. 1, January–February 1997, p. 43-47.  
Organization DA RTOP 232-01-04
- 52** Popernack, T. G., Jr.; Owens, L. R., Jr.; Hamner, M.; and Morris, M. J.: Application of Temperature Sensitive Paint for Detection of Boundary Layer Transition. Presented at 17th International Congress on Instrumentation in Aerospace Simulation Facilities, September 29–October 2, 1997, Monterey, California.  
Organization DA RTOP 522-31-51
- 53** Rausch, V. L.; McClinton, C. R.; and Crawford, J. L.: Hyper-X: Flight Validation of Hypersonic Airbreathing Technology. Presented at XIII ISABE (International Society for Air Breathing Engines), September 7-12, 1997, Chattanooga, Tennessee. ISABE Paper No. 97-7024.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/mtg/NASA-97-isabe-vlr.ps.Z>  
Organization LA RTOP 522-51-21
- 54** Rogers, J. L.: Reducing Design Cycle Time and Cost Through Process Resequencing. Presented at 11th International Conference on Engineering Design, August 19-21, 1997, Tampere, Finland. In Proceedings.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/mtg/NASA-97-11iced-jlr.ps.Z>  
Organization DF RTOP 509-10-11
- 55** Ross, H. M.; and O'Rourke, M. J.: Exploratory Investigation of Forebody Strakes for Yaw Control of a Generic Fighter With a Symmetric 60° Half-Angle Chine Forebody. NASA TP-3604, April 1997, 69 p.  
<ftp://techreports.larc.nasa.gov/pub/techreports/larc/1997/tp/NASA-97-tp3604.ps.Z>  
Organization DC RTOP 505-68-30
- 56** Rumsey, C. L.; Biedron, R. T.; and Thomas, J. L.: CFL3D: Its History and Some Recent Applications. NASA TM-112861, May 1997, 8 p.  
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- 593** Thomason, L. W.; Poole, L. R.; and Deshler, T.: A Global Climatology of Stratospheric Aerosol Surface Area Density Deduced From Stratospheric Aerosol and Gas Experiment II Measurements: 1984-1994. *Journal of Geophysical Research*, Volume 102, No. D7, 1997, p. 8967.  
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- 595** Winker, D. M.: LITE: Results, Performance Characteristics, and Data Archive. Presented at European Symposium on Aerospace Remote Sensing, September 22-26, 1997, London, England.  
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- 597** Winker, D. M.: Multiple Scattering Effects in Cirrus From a Simple Double-Scattering Model. Presented at 9th International Workshop on Multiple Scattering Lidar Experiments, September 16-19, 1997, Jerusalem, Israel.  
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- 613** Chambers, L. H.; Wielicki, B. A.; and Evans, K. F.: Independent Pixel and Two Dimensional Estimates of LANDSAT-Derived Cloud Field Albedo. *Journal of the Atmospheric Sciences*, Volume 54, No. 11, June 1, 1997, p. 1525-1532.  
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- 617** Charlock, T. P.; Rose, F. G.; Rutan, D.; Coleman, L. H.; Baum, B. A.; and Green, R. N.: The Total-Sky, Global Atmospheric Radiation Budget From Radiative Transfer Calculations Using ERBE, AVHRR, and Sounding Data. Presented at Ninth Conference on Atmospheric Radiation, February 2-7, 1997, Long Beach, California. In Proceedings, p. 60-63.  
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## Author Index

### A

Abbott, T. S.: 72  
Abedin, M. N.: 493  
Abel, I.: 1, 2, 94, 95  
Abu-Khajeeh, H.: 807  
Adams, D. L.: 886  
Ade, P. A.: 539  
Ahmadi, G.: 510  
Ahuja, K. K.: 765, 766  
Akimoto, H.: 546  
Alberta, T. L.: 604, 616, 621  
Alderfer, D. W.: 487  
Aldridge, H. A.: 369, 370, 371, 372, 375  
Alexandrov, N.: 41, 42, 725  
Allan, B. G.: 726  
Alter, S. J.: 11, 396  
Ambur, D. R.: 210, 211, 212, 235, 245,  
    268, 269, 511  
Ambur, M. Y.: 886  
Amer, T. R.: 487  
Amundsen, R. M.: 181  
Anastasi, R. F.: 213, 214  
Anderson, B. E.: 542, 543, 548  
Anderson, C. J.: 12, 887  
Anderson, E. C.: 407  
Anderson, J.: 602  
Anderson, M. S.: 246  
Anderson, W. K.: 13, 14, 727  
Aneja, V. P.: 549, 578  
Anon.: 73, 74, 75, 76, 672, 673, 855  
Antcliff, R. R.: 840  
Anthony, T. C.: 203  
Antill, C. W.: 486  
Applin, Z. T.: 29  
Arbaugh, J.: 350  
Arbuckle, P. D.: 143  
Arian, E.: 728, 729  
Asbury, S. C.: 15  
Atkins, H. L.: 208, 767, 768  
Atkinson, R. J.: 579  
Aurovillian, A.: 730  
Auslender, A. H.: 367  
Avery, D. E.: 883, 884  
Axelrad, P.: 535, 756, 757  
Ayers, J. K.: 621, 634, 635, 641, 647

### B

Babcock, D. A.: 206  
Babin, A.: 397  
Bacmeister, J. T.: 591  
Badavi, F. F.: 852, 907, 909  
Badhwar, G. D.: 907  
Bagwell, D. R.: 542, 543  
Bailey, M. C.: 179, 180  
Baker, D. J.: 262  
Bakos, R. J.: 160  
Balachandar, S.: 413  
Balas, G. J.: 193  
Balla, R. J.: 847  
Ballard, R. E.: 668, 800  
Banerjee, N. S.: 731  
Bar-Cohen, Y.: 313  
Barclay, R. O.: 888, 897, 898, 899, 902  
Barker, B. C.: 85, 857, 858  
Barker, H. W.: 605  
Barkstrom, B. R.: 606, 615  
Barnes, J. C.: 859, 860, 872  
Barnes, N. P.: 859, 861, 862, 863, 864, 865,  
    866, 867, 868, 869, 870, 874, 875, 876,  
    877, 878, 879  
Bartels, R. E.: 16  
Bataille, F.: 398  
Bates, K.: 347  
Baty, R. S.: 769  
Baucke, R. C.: 384  
Baughcum, S. L.: 548  
Baugher, A. H.: 314  
Baughman, J. A.: 158, 159  
Baum, B. A.: 607, 608, 617, 638  
Bavuso, S. J.: 706  
Bavykina, I.: 100  
Bayliss, A.: 410, 770, 791, 792  
Beaver, G. M.: 566, 588  
Beck, F. B.: 175, 383, 386  
Beer, R.: 601  
Belcastro, C. M.: 712  
Belvin, H. L.: 332  
Bement, L. J.: 96, 182, 183, 276, 491  
Bendura, R. J.: 546  
Benkner, S.: 680

- Benner, D. C.: 841, 842, 843, 844, 845, 846,  
     850, 851  
 Benson, S. V.: 485  
 Benton, E. V.: 909  
 Beran, P. S.: 125  
 Berry, J. D.: 97, 98, 99, 100, 103  
 Berry, S. A.: 17, 399, 400, 401, 405, 406, 433  
 Berry, V.: 262  
 Bertelrud, A.: 57  
 Bertin, J. J.: 401  
 Bertoglio, J-P.: 398  
 Bess, T. D.: 609, 610  
 Bettschart, N.: 98, 99  
 Bhatt, P. P.: 550, 567  
 Bianco, D. J.: 890  
 Bibb, K. L.: 18  
 Bichsel, H.: 852  
 Biedron, R. T.: 56  
 Bingham, J. G.: 186  
 Bird, R. K.: 278, 279  
 Bishop, A. P.: 898  
 Blackburn, C. L.: 495  
 Blackshire, J. L.: 475, 476, 477, 478, 479,  
     480  
 Blaisdell, G. A.: 447  
 Blake, D. R.: 545  
 Blanchard, A. E.: 19  
 Blanchard, R. C.: 20, 492  
 Blatherwick, R. D.: 590  
 Blosser, M. L.: 315  
 Blotter, J. D.: 484  
 Bodine, J. B.: 269  
 Bogan, S.: 215  
 Boggess, R. K.: 316, 352  
 Bokhari, S. H.: 681  
 Bonhaus, D. L.: 13  
 Boone, M. L.: 289  
 Boston, H. G.: 317  
 Boughner, R. E.: 555  
 Bouslog, S. A.: 17, 401  
 Bowers, A. H.: 456  
 Boyd, I. D.: 423  
 Brackett, V. G.: 534, 550  
 Bradshaw, J. D.: 544  
 Brandon, J. M.: 88, 144, 151, 152  
 Brauckmann, G. J.: 17, 49  
 Braun, R. D.: 48, 166, 168, 172, 173, 758
- Brennan, M. C.: 101  
 Brentner, K. S.: 771, 772, 773, 774, 775, 776,  
     777, 785, 786, 789  
 Brewer, W. D.: 278, 279  
 Brieger, J. T.: 784  
 Briegleb, B.: 443  
 Brinberg, H. R.: 888  
 Brinson, L. C.: 230  
 Britt, C. L.: 85  
 Brockman, P.: 857, 871  
 Brooks, T. F.: 816, 838  
 Browell, E. V.: 544  
 Brown, M. C.: 822  
 Bruce, R. A.: 206  
 Bruhl, C.: 551  
 Bryant, R. G.: 318, 319, 320, 321, 333, 338,  
     421  
 Buchholz, P.: 682  
 Buchman, A.: 321  
 Buckley, J. D.: 321  
 Buckley, L. J.: 330  
 Bullock, A. M.: 552  
 Bullock, K. T.: 488  
 Buning, P. G.: 21  
 Burkett, C. G., Jr.: 469, 487  
 Burley, C. L.: 804, 812  
 Burn, M.: 3  
 Burner, A. W.: 462, 463, 466, 474  
 Burnham, D.: 858  
 Burns, J. A.: 732  
 Burnside, W. D.: 389  
 Bush, H. G.: 353, 504  
 Bush, L. B.: 885  
 Bushnell, D. M.: 77, 78, 402, 403  
 Buttrill, C. W.: 144

## C

- Cahoon, D. R., Jr.: 575, 576  
 Cai, Z.: 694  
 Calkins, F. T.: 733  
 Callis, L. B., Jr.: 553, 554, 555  
 Camarda, C. J.: 404  
 Campbell, C. H.: 405, 406, 433  
 Campbell, R. E.: 859  
 Campbell, R. L.: 31  
 Campbell, S. D.: 79  
 Campbell, T. G.: 387

- Cano, R. J.: 322  
 Cantrell, J. H., Jr.: 667, 668, 671, 778, 779,  
     800, 837  
 Caplan, M. L.: 356, 363  
 Caram, J. M.: 17, 401, 405, 406  
 Carey, J.: 3  
 Carli, B.: 539  
 Carlson, A. B.: 609, 611  
 Carlson, H. W.: 102  
 Carlson, J. R.: 22, 23  
 Carpenter, B. D.: 80  
 Carpenter, M. H.: 38, 452  
 Carzoo, S. W.: 110  
 Cassidy, P. E.: 317, 350  
 Castillo, V. K.: 867  
 Castrogiovanni, A.: 160  
 Cebe, P.: 351  
 Chadwick, K.: 407  
 Chaffin, M. S.: 100, 103  
 Chambers, L. H.: 612, 613, 614, 615  
 Chan, K. R.: 548  
 Chang, A. C.: 323, 342, 343  
 Chang, C. K.: 669  
 Chang, H-C.: 734  
 Chapman, B.: 683  
 Chapman, J. J.: 533  
 Charlock, T. P.: 604, 616, 617, 645, 646  
 Cheatwood, F. M.: 48, 49, 167, 172, 444, 458  
 Chen, F-J.: 24  
 Childers, B. A.: 915  
 Chin, D. K.: 81  
 Chiou, E-W.: 556  
 Chiueh, T-C.: 684  
 Choi, S. H.: 135, 481  
 Chokani, N.: 27, 45  
 Chow, P. L.: 780  
 Chu, H.: 522  
 Chu, J.: 102  
 Chu, W. P.: 552, 556, 557  
 Chuang, C. W.: 389  
 Ciardo, G.: 682, 685, 686, 687  
 Clark, L. R.: 781, 834, 835  
 Clark, R. L.: 496  
 Claude, H.: 551  
 Clendenin, C. G.: 304  
 Cler, D. L.: 25  
 Coats, T. W.: 216  
 Cockburn, B.: 735, 736  
 Cockrell, C. E., Jr.: 26  
 Cockrell, C. R.: 175, 383, 386  
 Cofer, W. R., III: 542, 543, 575, 576  
 Cole, S. R.: 104  
 Coleman, L. H.: 617, 618  
 Collins, J. E., Jr.: 548  
 Collis, S. S.: 408  
 Connell, J. W.: 324, 325, 326, 327, 334, 355,  
     782, 783  
 Conner, D. A.: 784, 827  
 Connors, V. S.: 558  
 Considine, G. D.: 559, 560, 561  
 Conway, E. J.: 481  
 Cook, A. L.: 482  
 Cook, G. M.: 497  
 Cooper, B. A.: 384  
 Cooper, J. B.: 328  
 Costen, R. C.: 329, 619  
 Costulis, J. A.: 860  
 Cox, B. N.: 217  
 Cox, D. E.: 187, 193, 496  
 Cox, J. S.: 785, 786  
 Cramer, K. E.: 759, 760, 764  
 Cravey, R. L.: 82, 91, 176, 376, 388  
 Crawford, J. L.: 53, 108  
 Credeur, L.: 83  
 Crockett, T. W.: 681, 699  
 Crookston, J. R.: 186  
 Crutzen, P. J.: 551, 568, 584  
 Cucinotta, F. A.: 662, 663, 664, 665, 666,  
     669, 670, 852, 853, 854, 905, 907, 908,  
     910, 911, 912, 913, 914  
 Curry, J. A.: 560, 561  
 Curry, T. J.: 151  
 Cutler, A. D.: 141  
 Cvitkovich, M. K.: 218, 219  
 Czech, J.: 3

## D

- Dambach, M. L.: 489, 490  
 Dasey, T. J.: 79  
 Dash, S. M.: 830  
 Daugherty, R. H.: 105  
 Dausch, D. E.: 881  
 Davidson, M. R.: 297  
 Davidson, P. C.: 485

Davies, C. B.: 433  
Davila, C. G.: 212, 532  
Davis, D. D., Jr.: 546  
Davis, J. G., Jr.: 220  
Davis, P. A.: 106  
Davis, R. E.: 483  
Davis, W. T.: 171  
Dawicke, D. S.: 280, 281, 282, 283, 289, 290, 291  
De Young, R. J.: 488, 562, 563  
DeCoursey, R. J.: 603  
Debnam, W. J., Jr.: 368  
Del Rosario, R. C.: 737, 738  
Delany, A. C.: 564  
Demeo, M. E.: 500, 501  
Demuren, A. O.: 457  
Deng, X.: 221  
Denn, F. M.: 609, 657, 658  
Dennis, J. E., Jr.: 725  
Desai, P. N.: 166, 167  
Deshler, T.: 581, 593  
Deshpande, M. D.: 177, 178, 179, 376, 380, 381, 382, 383, 386  
Devezeaux, D.: 439  
Devi, V. M.: 841, 842, 843, 844, 845, 846, 850, 851  
Dexter, H. B.: 222, 261  
Dharamsi, A. N.: 552  
DiFulvio, M.: 405  
DiPasquale, R. C.: 620  
Dibb, J. E.: 544  
Dicello, J. F.: 662, 664, 665  
Dodds, R. H., Jr.: 295  
Doelling, D. R.: 621, 635, 636, 658  
Doggett, G. P.: 27  
Domack, M. S.: 298  
Dominik, C. J.: 46  
Donald, J. K.: 284  
Donatelli, S.: 682  
Dopker, B.: 269  
Dougherty, R. P.: 781  
Dow, M. B.: 222  
Drayson, S. R.: 551  
Drummond, J. P.: 44, 136, 137, 142, 452  
Dubey, R. R.: 906, 914  
Duck, P. W.: 409  
Dudley, K. L.: 393

Duerksen, N.: 145  
Dunn, H. J.: 41, 42  
Dunn, M. H.: 787  
Durham, M. H.: 126, 127  
Dutson, J. D.: 186  
Dyer, J.: 223, 272  
Dyer, J. E.: 288

## E

Eashoo, M.: 330  
Ebeling, C. E.: 171  
Eck, T. F.: 547  
Edahl, R. A.: 285  
Edgington, J. M.: 698  
Edwards, B. D.: 784  
Edwards, J. W.: 16, 107  
Edwards, T.: 142  
Edwards, W. C.: 859  
Eklund, D. R.: 138  
Elber, W.: 224  
Eldred, C. H.: 169  
Ellis, K. S.: 562  
Engelund, W. C.: 51, 166  
Erdos, J. I.: 160  
Erlebacher, G.: 37  
Ertur, E.: 859, 865  
Esler, S. L.: 892, 894  
Espe, M.: 314  
Espy, P. J.: 582  
Eure, K. W.: 788  
Evans, D. S.: 554  
Evans, K. F.: 539, 612, 613, 614  
Everett, R. A., Jr.: 224  
Ewing, J. J.: 872

## F

Fairlie, T. D.: 565, 569, 584  
Farassat, F.: 769, 775, 781, 789, 790, 834, 835  
Farley, G. L.: 225, 226, 227  
Farokhi, S.: 25  
Fay, C. C.: 362  
Fears, S. P.: 110  
Feldl, E. K.: 627, 647  
Fenno, C. C., Jr.: 410, 791, 792  
Ferebee, M. J., Jr.: 184, 185

- Ferney, B. D.: 186  
 Ferney, G. D.: 186  
 Fichter, W. B.: 498  
 Fidell, S.: 821  
 Fields, J. M.: 793  
 Filer, E. D.: 864  
 Finley, T. D.: 474  
 Fisher, B. D.: 84  
 Fishman, J.: 443, 534, 537  
 Fitch, J. W.: 317, 350  
 Flanagan, G.: 217  
 Flatau, A. B.: 733  
 Fleming, G. A.: 484  
 Flug, B. T.: 618  
 Folkman, S. L.: 186  
 Follett, W. W.: 41, 42  
 Fox, R. L.: 421  
 Fralick, D. T.: 90, 91, 180  
 Franke, J. M.: 164  
 Freehart, R. E.: 79  
 Freeman, D. C., Jr.: 108  
 Freeman, G. L.: 207  
 Fremaux, C. M.: 47, 146  
 Frendi, A.: 794, 795  
 Friedman, A. D.: 213, 214  
 Fripp, A. L., Jr.: 368  
 Fuchs, H.: 692  
 Fuller, C. R.: 797  
 Fulton, J. P.: 293, 304, 305, 310  
 Fung, J.: 509
- G**
- Gaeta, R. J., Jr.: 765, 766  
 Gandrud, B.: 548  
 Gangloff, R. P.: 209  
 Garber, D. P.: 636, 642  
 Garbos, R.: 915  
 Gardner, J. E.: 207  
 Garg, D. P.: 204  
 Garn, M. A.: 170  
 Garrison, J. L., Jr.: 464, 535, 756, 757  
 Gartenberg, E.: 411, 418  
 Gary, B. L.: 548  
 Gates, T. S.: 215, 228, 229, 230, 231, 265,  
     274, 286, 837  
 Gatlin, G. M.: 28  
 Gatski, T. B.: 57, 427, 428, 429, 434, 454
- Gawronski, W. K.: 112  
 Geels, T. J.: 93  
 Geer, J. F.: 731  
 Gell, D.: 205, 529  
 Generazio, E. R.: 499  
 George, J.: 423  
 Gerhold, C. H.: 781, 796, 816, 834, 835  
 Gerndandt, H.: 551  
 Gibbs, G. P.: 797  
 Gibson, G. G.: 657, 658  
 Gierow, P. A.: 347  
 Giesy, D. P.: 194, 197  
 Gilbert, M. G.: 500, 501  
 Gile-Laflin, B. E.: 29  
 Gilinsky, M. M.: 829  
 Gilreath, M. C.: 389  
 Girimaji, S. S.: 412, 413, 414, 674  
 Giuliano, V. J.: 12, 67  
 Glaessgen, E. H.: 266  
 Glass, C. E.: 415  
 Glass, D. E.: 232, 277, 331, 419  
 Glassman, M.: 887  
 Gleason, J. R.: 321  
 Gloss, K.: 509  
 Gmelin, B.: 838  
 Gnoffo, P. A.: 44, 416, 455  
 Goetz, J. M.: 314  
 Goldberg, J. H.: 81  
 Goldman, A.: 590  
 Goldthorpe, S. H.: 147, 148  
 Golich, V. L.: 889, 900  
 Good, D. H.: 10  
 Goodhead, D. T.: 663  
 Goodrich, K. H.: 149  
 Gordley, L. L.: 566, 567, 588  
 Gottlich, G. L.: 890  
 Gottlieb, D. I.: 734  
 Grant, M. S.: 675  
 Grant, W. B.: 547  
 Green, B. E.: 30, 31  
 Green, L. L.: 63  
 Green, R. N.: 607, 610, 617, 622, 658  
 Greene, F. A.: 48, 49, 455  
 Greene, G. C.: 88  
 Gregory, G. L.: 542, 543, 544, 545  
 Grenoble, R. W.: 332, 344  
 Griffith, D. W.: 590

- Groom, N. J.: 373, 374  
 Grooss, J. U.: 568, 584  
 Grosch, C. E.: 693  
 Grose, W. L.: 565, 568, 569, 584  
 Guattery, S.: 688, 739  
 Gunzburger, M. D.: 37  
 Gupta, I. J.: 389  
 Gupta, R. N.: 417  
 Gupta, S.: 196, 618  
 Gupta, S. K.: 623, 656  
 Gurdal, Z.: 519
- H**
- Hadid, A. H.: 41, 42  
 Haering, E. A., Jr.: 456  
 Hafley, R. A.: 287  
 Hahne, D. E.: 150  
 Haimovitch, Y.: 418  
 Haines, M.: 683, 689  
 Halama, G. E.: 465, 562  
 Hales, S. J.: 287  
 Haley, P. J.: 720, 724  
 Hall, I. K.: 288  
 Hall, S. G.: 6  
 Hamilton, H. H., II: 416, 455  
 Hammond, D. P.: 707  
 Hamner, M.: 52, 161  
 Han, J.: 87  
 Hannemann, K.: 5  
 Hansen, J.: 624  
 Hansen, M. G.: 349  
 Hardin, J. C.: 798, 799, 833  
 Hardy, R. C.: 881  
 Hargens, A. R.: 668, 800  
 Harmon, D.: 231  
 Harris, C. E.: 109, 216, 233, 253  
 Harrison, E. F.: 657  
 Hart, R. C.: 847  
 Hartley, P. J.: 306  
 Harvey, J. K.: 423  
 Hass, D. D.: 419  
 Hassan, H. A.: 440  
 Havens, S. J.: 333  
 Hawkins, R.: 50  
 Hayder, M. E.: 208, 420, 690  
 Hayhurst, K. J.: 676  
 Hays, P. B.: 589
- Hazlewood, R. N.: 25  
 Hearn, C. P.: 390  
 Heck, M. L.: 170  
 Heck, P. W.: 638, 640, 642  
 Heinrichs, R. M.: 79  
 Hellbaum, R. F.: 421  
 Helm, J. D.: 289, 290, 302  
 Helmetsie, C. L.: 891  
 Hemm, R. V.: 7  
 Hendricks, H. D.: 482  
 Hergenrother, P. M.: 324, 325, 326, 327, 333, 334, 335, 355, 782, 783  
 Herman, G. S.: 570  
 Herring, G. C.: 847, 856  
 Hesthaven, J. S.: 422, 740  
 Heyman, J. S.: 493  
 Hillard, M. E., Jr.: 856  
 Hinders, M. K.: 213, 214  
 Hinkley, J. A.: 228, 234, 265, 336, 337  
 Hinton, D. A.: 86, 87  
 Hinton, P. O.: 622  
 Hintsa, E.: 585  
 Hoadley, S. T.: 126, 127  
 Hodge, J. S.: 139  
 Hoell, J. M., Jr.: 546  
 Hoffler, K. D.: 110  
 Holben, B. N.: 547  
 Holden, M. S.: 407, 423, 439  
 Holland, P. C.: 776  
 Holloway, C. M.: 676, 708  
 Holmes, B. J.: 4  
 Holmes, C.: 491  
 Holt, H. M.: 713  
 Holt, M.: 726  
 Hom, K. W.: 377, 384  
 Hooker, J. R.: 466  
 Hooker, M. W.: 873, 882  
 Horonjeff, R. D.: 801  
 Horta, L. G.: 510  
 Horton, G.: 741  
 Horvath, T. J.: 5, 399, 405, 406, 423, 424, 433, 439, 440  
 Hou, T-H.: 338, 339, 340  
 Houser, S. A.: 6  
 Housner, J. M.: 502  
 Howard, T. P.: 883, 884  
 Howe, R. R.: 821

Howell, C. T., III: 464  
Hsiao, M-H.: 187  
Hu, F. Q.: 420  
Hu, Y.: 625  
Huai, X.: 32, 425  
Huang, J-K.: 187  
Huebner, L. D.: 139  
Humphreys, W. M., Jr.: 816  
Hunt, J. L.: 33, 34  
Hunter, W. W., Jr.: 816  
Hussaini, M. Y.: 37, 409, 420  
Hutcheson, R. L.: 865, 868, 874  
Huttsell, L. J.: 125

## I

Inman, D. J.: 701  
Interrante, V.: 691, 692, 693  
Ivanov, M.: 439

## J

Jackson, K. E.: 236, 503  
Jacobs, J. A.: 207  
Jager, H.: 580  
Jagharghi, A. J.: 469  
Jalink, A., Jr.: 421  
Jambor, B.: 915  
James, G. H., III: 199, 518  
James, M. A.: 253, 291  
Jameson, A.: 426  
Jameson, L.: 740  
Jani, M. G.: 866, 874, 875, 876  
Jansen, B. J.: 830  
Jarnot, R.: 529  
Jaunky, N.: 235  
Javeed, M. A.: 202  
Jegley, D. C.: 504  
Jensen, B. J.: 322, 328, 333, 336, 341, 342, 343, 365, 366  
Jobson, D. J.: 467, 471  
Joffe, B.: 313  
Johnson, A. F.: 236  
Johnson, A. R.: 113, 489, 490  
Johnson, J. P.: 10  
Johnson, S. D.: 714  
Johnston, N. J.: 332, 339, 340, 344, 364  
Johnston, P. H.: 242, 764

Johnston, W.: 229, 286  
Jones, F. P.: 802  
Jones, H. E.: 803, 804  
Jones, J. E.: 694, 695  
Jones, K. M.: 29  
Jones, M. G.: 805  
Jones, N. B.: 590  
Jones, R. L., III: 483  
Jones, S. M.: 375  
Jones, T. D.: 669, 914  
Jongen, T.: 427, 428, 429  
Joppa, P. D.: 806  
Jordan, F. L., Jr.: 144  
Jordan, W.: 906, 914  
Joshi, S. M.: 188, 721, 722, 723  
Joslin, R. D.: 32, 35, 36, 37, 425, 430  
Juang, J-N.: 193, 200, 201, 370, 371, 372, 505, 506, 507, 788

## K

Kalkhoran, I.: 131  
Kallemeyn, P. H.: 173  
Kaneko, H.: 742  
Kangro, U.: 743  
Kaplan, B. J.: 6  
Kaplan, J. A.: 709  
Kasdin, N. J.: 756, 757  
Kaszubowski, M. J.: 883, 884  
Katz, R.: 666  
Katzberg, S. J.: 464  
Kaushik, D. K.: 696  
Kearney, M. E.: 883  
Kelble, C. A.: 161  
Kelkar, A. G.: 188, 721, 722, 723  
Kelly, J. J.: 807, 819  
Kelly, K. K.: 587  
Kemper, P.: 682  
Kenakowski, D.: 830  
Kennedy, C. A.: 38  
Kennedy, J. M.: 897, 898, 902  
Kenner, W. S.: 345  
Kenney, P. S.: 709  
Kenny, S. P.: 197  
Kent, B. M.: 389  
Kent, G. S.: 592, 651  
Keyes, D. E.: 690, 696  
Kiefer, R. L.: 237

- Kiehl, J. T.: 443  
 Killough, B. D., Jr.: 431  
 Kim, M. Y.: 237, 905, 906, 912, 914  
 Kincaid, R. K.: 677, 678  
 Kindervater, C.: 236  
 King, B. B.: 732  
 Kizer, E. A.: 618  
 Klausmeyer, S. M.: 39  
 Kleb, W. L.: 40  
 Klein, V.: 117, 151  
 Kloepfel, P. K.: 485  
 Knight, N. F., Jr.: 235, 345, 508, 523  
 Ko, M. K.: 594, 603  
 Koch, G. J.: 85, 378, 857  
 Koch, M. R.: 536  
 Kogan, M. N.: 432  
 Kokta, M. R.: 876  
 Konradi, A.: 913  
 Koppen, D. M.: 715  
 Korte, J. J.: 41, 42, 43, 407  
 Kosmatka, J. B.: 123  
 Kostiuk, P. F.: 7  
 Kotler, M. L.: 899  
 Koutsavdis, E. K.: 777  
 Kratz, D. P.: 626  
 Krishnamurthy, R.: 140  
 Kroo, I. M.: 168  
 Krueger, A. J.: 537  
 Kuchar, J. K.: 80  
 Kumar, A.: 44  
 Kumar, R. R.: 170  
 Kumfert, G.: 697  
 Kvaternik, R. G.: 120, 121  
 Kwan, H. W.: 808
- L**
- Laba, K. E.: 677  
 Lach, C. L.: 209, 288  
 Lachowicz, J. T.: 19, 45  
 Lake, M. S.: 509  
 Lamb, M.: 25  
 Lambeth, J. D.: 554, 555  
 Lan, C. E.: 152  
 Langston, C. W.: 132  
 Larman, K. T.: 627, 647  
 Laruelle, G.: 33  
 Lasseigne, D. G.: 409
- Lawrence, R. W.: 395  
 Lay, R.: 205, 529  
 LeBeau, G. J.: 415, 492  
 LeCroy, S. R.: 627, 628, 629, 654  
 Lee, D. A.: 6, 7  
 Lee, E. W.: 238  
 Lee, J. H.: 481  
 Lee, R. B., III: 630, 631  
 Lee, S. M.: 238, 240  
 Lee-Glauser, G. J.: 510  
 Leighton, T.: 688  
 Leighty, B. D.: 469  
 Lepsch, R. A., Jr.: 758  
 Letnikov, V.: 100  
 Leutenegger, S. T.: 698  
 Levine, J. S.: 571, 572, 573, 574, 575, 576,  
     577, 578  
 Lewis, K.: 111  
 Lewis, R. M.: 725, 744, 745  
 Li, J.: 238, 239, 240, 241  
 Liceaga, C. A.: 189, 190  
 Liechty, D. S.: 509  
 Lih, S.-S.: 313  
 Lim, K. B.: 112, 191, 192, 193, 194, 203  
 Lin, B.: 632  
 Lin, G.-F.: 152  
 Lin, J. C.: 39, 46  
 Lin, Y-L.: 87  
 Lindsay, D.: 262  
 Lingenfelser, G. S.: 565, 569, 584  
 Little, A. D.: 537  
 Liu, H.: 465  
 Liu, S. C.: 546  
 Liu, T.: 463  
 Lockard, G. E.: 877, 878, 879  
 Loncaric, J.: 746  
 Long, M.: 321  
 Loomis, M. P.: 406, 433  
 Lopez, M. A.: 698  
 Lotts, C. G.: 495  
 Lowther, S. E.: 343  
 Lu, J.: 579, 580, 602  
 Lucas, M. J.: 809, 810  
 Luck, W. S.: 562  
 Lyle, K. H.: 811, 812  
 Lyrintzis, A. S.: 777  
 Lytle, C. D.: 378

**M**

- Ma, K-L.: 684, 699, 705  
Maa, M-H.: 892  
Mabry, M.: 662, 664, 665  
Mace, G. G.: 639  
Machiels, L.: 428, 429  
Mackenzie, A. I.: 379  
Madaras, E. I.: 213, 214, 242, 494  
Maestrello, L.: 410, 770, 780, 791, 792, 795,  
    813, 814  
Maghami, P. G.: 195, 196, 197, 198  
Mahalov, A.: 397  
Maiden, D. L.: 670  
Malekpour, M. R.: 700  
Malone, B.: 6  
Malone, J. B.: 516, 716, 717  
Maly, K.: 895, 896  
Manning, S. D.: 275  
Marchello, J. M.: 234, 329, 332, 337, 339,  
    344, 364  
Marcolini, M. A.: 784, 809, 810  
Marconi, F.: 131  
Marion, M.: 734  
Markelov, G.: 439  
Marsh, W. D.: 859  
Marshall, B. T.: 539, 567, 582  
Marshall, R. E.: 391, 392  
Martinson, S. D.: 411  
Mason, A. J.: 113  
Mason, B. H.: 495  
Mason, M. L.: 68  
Massie, S. T.: 581  
Masters, J. E.: 243  
Matthews, M. P.: 79  
Matthews, W. A.: 579, 590  
Matthews, W. T.: 244  
Mauldin, L. E., III: 557  
Mavriplis, D. J.: 747  
Mavris, D. N.: 122  
Mayor, S.: 637, 638  
Mazanek, D.: 170  
McAdoo, J. A.: 465  
McClinton, C. R.: 34, 53, 108  
McComb, W. D.: 461  
McCormick, M. P.: 556, 557, 587, 651  
McCormick, S. F.: 694  
McCullers, L. A.: 102  
McDaniel, P. R.: 346  
McDermid, I. S.: 551  
McGee, T. J.: 551  
McGhee, R. J.: 28  
McGowan, A. R.: 101  
McGowan, D. M.: 245, 246, 511  
McGrory, J.: 491  
McInerney, J. M.: 551  
McMinn, J. D.: 26, 114  
McNair, H. M.: 365, 366  
McNeal, R. J.: 546  
McNeil, S. R.: 290, 302  
Meador, W. E., Jr.: 481  
Meadows, K. R.: 815, 816  
Mehrotra, P.: 680, 683, 690  
Melson, N. D.: 695  
Melvin, L. D.: 915, 916  
Mergenthaler, J. L.: 581  
Merrill, J. T.: 545  
Merski, N. R.: 406  
Messier, B. C.: 234, 332  
Meyer, J. M.: 890  
Micheletti, D. A.: 158, 159  
Miller, G. L.: 688  
Miller, J.: 913  
Mills, C. T.: 68  
Mims, F. M., III: 547  
Mineck, R. E.: 31  
Miner, A. S.: 685  
Miner, G. A.: 347  
Miner, P. S.: 714  
Minguet, P. J.: 218, 219  
Minnis, P.: 607, 621, 632, 633, 634, 635, 636,  
    637, 638, 639, 640, 641, 642, 649, 650,  
    651, 658, 659, 660  
Mirick, P. H.: 71, 132  
Mitchell, C. M.: 162  
Mitcheltree, R. A.: 47, 48, 49, 66, 167, 172  
Mlynaczak, M. G.: 539, 582  
Moas, E.: 512  
Moats, C. D.: 627, 647  
Modlin, E. A.: 877, 878, 879  
Moeller, K. J.: 393  
Mohnen, V. A.: 579, 580, 602  
Moitra, S.: 434  
Monell, D. W.: 185  
Mongan, P. T.: 884

- Montgomery, B. C.: 547  
 Moore, A. A.: 168, 758  
 Moore, T. C., Sr.: 468  
 Morelli, E. A.: 115, 116, 117  
 Morgan, R. G.: 435, 436  
 Morris, M. J.: 52  
 Morris, W. D.: 171  
 Morrison, C. A.: 864  
 Moses, R. W.: 118, 119, 124, 513  
 Moss, J. N.: 20, 44, 48, 66, 417, 437, 438  
 Mudukutore, A.: 391, 392  
 Mueller, A. W.: 817, 827  
 Multhaup, H. A.: 183  
 Murcray, D. G.: 590  
 Murcray, F. J.: 590  
 Murphy, K. D.: 818  
 Murphy, P. C.: 151  
 Murray, J.: 378  
 Murray, K. E.: 865, 866, 867, 868, 870, 875, 876  
 Murri, G. B.: 247, 248  
 Muylaert, J.: 439  
 Myers, M. K.: 790  
 Myers, T.: 392

## N

- Namkung, M.: 292, 293, 304, 305, 310, 311, 764  
 Nance, R. P.: 440  
 Narayanan, R.: 368  
 Natarajan, M.: 554, 555  
 Nath, S.: 293  
 Nath, S. C.: 304, 305, 310  
 Neal, D. M.: 244  
 Neil, D. O.: 537  
 Neil, G. R.: 485  
 Nejad, A. S.: 142  
 Nelson, G. L.: 158, 159  
 Nelson, M. L.: 890, 892, 893, 894, 895, 896  
 Nemeth, M. P.: 514, 515  
 Nettles, A. T.: 249  
 Newell, R. E.: 546  
 Newman, J. C., Jr.: 221, 233, 250, 251, 252, 253, 270, 275, 281, 282, 289, 290, 294, 295, 296, 298, 303, 348  
 Newman, P. A.: 63  
 Nguyen, C.: 378

- Nguyen, L.: 641, 659, 660  
 Nguyen, L. C.: 819  
 Nguyen, T. T.: 650  
 Nicol, D. M.: 681, 686  
 Nicolaenko, B.: 397  
 Nicolaides, R. A.: 37, 387, 743  
 Nikjoo, H.: 663  
 Nixon, M. W.: 120, 121, 123  
 Noll, T. E.: 163  
 Nolt, I. G.: 538, 539  
 Noonan, K. W.: 71  
 Noor, A. K.: 516, 716, 717  
 Noren, R. D.: 742  
 Norfolk, D. R.: 385  
 Northam, G. B.: 138, 141, 418  
 Novelli, P. C.: 558  
 Nowak, R. J.: 400  
 Nowicki, G. D.: 542, 543

## O

- O'Brien, T. K.: 218, 219, 238, 239, 240, 241, 247, 248, 254, 255, 256  
 O'Neill, P.: 663  
 O'Rourke, M. J.: 55  
 Oglesby, D. M.: 469  
 Ohlhorst, C. W.: 257  
 Olson, E. D.: 122  
 Olson, J. R.: 443, 583  
 Olynick, D. R.: 416  
 Orient, G. E.: 41, 42  
 Ortland, D.: 589  
 Orwoll, R. A.: 237, 365, 366  
 Outlaw, R. A.: 297  
 Overstreet, T.: 376  
 Owens, L. R., Jr.: 52, 161  
 Owens, M.: 367  
 Owre, S.: 710, 718  
 Ozoroski, L. P.: 102

## P

- Packard, A.: 726  
 Padilla, P. A.: 742  
 Padula, S. L.: 677, 678, 679, 820  
 Palikonda, R.: 640, 642, 660  
 Palmer, M. T.: 162  
 Palumbo, D. L.: 820

- Papadopoulos, P.: 433  
 Pappa, R. S.: 199, 200, 201, 500, 501, 517, 518, 530  
 Parham, T.: 262  
 Park, J. H.: 441  
 Park, K.: 539  
 Parkin, D. M.: 207  
 Parmar, D. S.: 470, 473  
 Parrott, T. L.: 836  
 Pater, R. H.: 314, 340, 349  
 Patterson, J. D.: 394  
 Paull, A.: 435, 436  
 Paxton, S.: 797  
 Parsons, K. S.: 821  
 Penland, J. A.: 50  
 Peraire, J.: 18  
 Perras, G. H.: 79  
 Perry, B., III: 163  
 Perry, C. A.: 519  
 Perry, R. B.: 83, 86, 276  
 Peterson, G. P.: 404  
 Petros, M.: 878  
 Pettit, R. G.: 298  
 Phan, M. Q.: 506, 507  
 Philippe, J. J.: 838  
 Phillips, E. A.: 212  
 Phillips, E. P.: 284, 296, 520  
 Phillips, M. S.: 903  
 Phillips, W. P.: 51  
 Piasek, R. S.: 233, 258, 259, 260, 273, 299, 300, 301, 302  
 Piatak, D. J.: 123  
 Pierce, R. B.: 550, 565, 568, 569, 584, 585  
 Piland, W. M.: 174  
 Pilkey, D. F.: 701  
 Pinelli, T. E.: 887, 888, 889, 897, 898, 899, 900, 901, 902, 904  
 Pinkerton, J. L.: 124  
 Pinto, J. P.: 577  
 Piomelli, U.: 32, 425, 442, 472  
 Pizer, S.: 692  
 Plant, J. V.: 647  
 Plentovich, E. B.: 60  
 Plotnikov, Y.: 761  
 Podolske, J. R.: 548  
 Poe, C. C., Jr.: 261, 266  
 Pollock, W. D.: 283  
 Ponton, M. K.: 822, 830  
 Poole, L. R.: 552, 586, 592, 593  
 Pope, S.: 621  
 Popelka, D.: 262  
 Popernack, T. G., Jr.: 52, 161  
 Portmann, R. W.: 443  
 Pothen, A.: 697  
 Powell, C. A.: 823, 831  
 Powell, R. W.: 166  
 Prabhakaran, R.: 216, 300  
 Prasad, B. D.: 419  
 Pretlow, R. A.: 667  
 Price, J. M.: 417, 437, 438  
 Prichard, D. S.: 812  
 Prieur, J.: 838  
 Prior, E. J.: 540  
 Proctor, F. H.: 87  
 Proffitt, M. H.: 569  
 Prosser, W. H.: 263, 264, 824  
 Purcell, P. N.: 551  
 Purgold, G. C.: 628, 653  
 Puster, R. L.: 164

## Q

- Quarles, G. J.: 867  
 Quigley, P. A.: 620  
 Quinn, J. E.: 141

## R

- Radespiel, R.: 753, 832  
 Radeztsky, R. H.: 463  
 Rahman, Z-U.: 467, 471  
 Raju, I. S.: 261, 265, 266, 307  
 Raman, V. V.: 232  
 Ramsey, C. R.: 854  
 Randall, D. A.: 643  
 Rankin, C. C.: 526, 532  
 Ransom, J. B.: 521, 527  
 Ransone, P. O.: 257, 267  
 Rausch, V. L.: 53, 108  
 Reddy, C. J.: 376, 380, 381, 382, 383, 386  
 Reddy, V. S.: 317, 350  
 Refaat, T.: 562  
 Reichle, D. J., Jr.: 859  
 Reichle, H. G., Jr.: 558  
 Reis, H.: 135

- Remsberg, E. E.: 550, 566, 567, 585, 588  
 Retina, N.: 6  
 Reubush, D. E.: 108  
 Rhodes, M. D.: 223, 272  
 Rich, D. C.: 351  
 Riddell, W. T.: 301, 302  
 Riggs, H. R.: 522  
 Riley, C. J.: 18, 444, 455, 458  
 Rinsland, C. P.: 590, 601, 841, 842, 843, 844,  
     845, 846, 850, 851  
 Ristorcelli, J. R.: 414, 445, 446, 447  
 Ritchey, N. A.: 644, 656  
 Ritter, P.: 9  
 Rivera, J. A., Jr.: 104  
 Rivers, R. A.: 88  
 Rizzi, S. A.: 818, 825  
 Roback, V. E.: 399  
 Robarge, W. P.: 578  
 Robbins, J. L.: 618  
 Robert, W. E.: 801  
 Roberts, A. S., Jr.: 418  
 Roberts, E.: 8, 9  
 Roberts, T. W.: 92, 826  
 Roche, A. E.: 589  
 Rodgers, W. G., Jr.: 89, 661  
 Rodriguez, J. M.: 594, 603  
 Rodriguez, W. J.: 869, 874  
 Roe, K. P.: 701  
 Roell, M. M.: 541  
 Rogers, J. L.: 54, 711  
 Rogers, R. C.: 140, 160  
 Rohrbach, W. W.: 421  
 Rombado, G.: 531  
 Rommel, M.: 334  
 Rosch, W. R.: 368  
 Rose, C. A.: 524, 525, 526, 532  
 Rose, F. G.: 617, 645  
 Rosenlof, K. H.: 587  
 Rosolovsky, J.: 352  
 Ross, H. M.: 55  
 Rouse, M.: 210, 268, 269  
 Rousseau, C. Q.: 241, 247, 248  
 Rowe, G. S.: 79  
 Rowsell, E. A.: 186  
 Rubinstein, R.: 448, 449  
 Rubira, A. F.: 352  
 Rudis, R.: 858  
 Rummler, D. R.: 404  
 Rumsey, C. L.: 56, 57, 450, 785, 786  
 Rushby, J.: 718  
 Russell, J. M., III: 539, 550, 551, 566, 568,  
     569, 581, 584, 585, 587, 588, 589, 591  
 Russell, J. W.: 202  
 Russell, T. F.: 694  
 Rutan, D.: 610, 617, 645, 646, 656  
 Ryaben'kii, V. S.: 58, 748
- S**
- Sachse, G. W.: 537, 545, 548  
 Salas, A. O.: 41, 42, 711  
 Salas, M. D.: 387, 729  
 Sandford, S. P.: 486, 488, 536, 562, 570  
 Sandholm, S. T.: 544  
 Sankaran, S. N.: 232  
 Sansano, A. M.: 703  
 Santa Maria, O. L.: 827  
 Sarghini, F.: 472  
 Sarkar, S.: 442  
 Sato, Y.: 901, 902  
 Sawyer, J. W.: 353  
 Saxena, V. K.: 602  
 Schaefer, J.: 314  
 Scherner, M. J.: 395  
 Scheuer, E.: 544  
 Schimmel, M. L.: 491  
 Schmidlin, F. J.: 582  
 Schneider, T. L.: 340  
 Schoeberl, M.: 589  
 Schowalter, D. G.: 87  
 Schuster, D. M.: 125  
 Schuster, G. L.: 627, 647  
 Schutte, P. C.: 133, 134  
 Schwab, R. W.: 93  
 Scott, C. J.: 594  
 Scott, M. A.: 411  
 Scott, R. C.: 126, 127  
 Scotti, S. J.: 135  
 Seale, M. D.: 824  
 Sealey, B. S.: 469, 487  
 Segal, C.: 367  
 Seiner, J. M.: 822, 828, 829, 830  
 Seshadri, B. R.: 270, 303  
 Settle, T. B.: 120, 121  
 Seywald, H.: 203

- Shaeffer, J. F.: 377, 384  
 Shah, G. H.: 88  
 Shahinpoor, M.: 313  
 Shakarian, A.: 93  
 Shankar, N.: 710, 718  
 Shapiro, G.: 7  
 Sharp, D.: 271  
 Shavers, M. R.: 666  
 Shaw, R. J.: 64  
 Shebalin, J. V.: 451  
 Sheldon, B. W.: 734  
 Shen, S. N.: 895, 896  
 Sherlock, V. J.: 590  
 Shinn, J. L.: 670, 852, 905, 906, 907, 909,  
     912, 914  
 Shinn, M. D.: 485  
 Shipham, M. C.: 545  
 Shirinzadeh, B.: 848  
 Shivakumar, K. N.: 253  
 Shu, C-W.: 735, 736, 749  
 Shuer, L. M: 668  
 Shull, T. A.: 385  
 Sichel, E.: 351  
 Sickles, R. G.: 10  
 Sidilkover, D.: 92, 750, 826  
 Sikorski, K.: 705  
 Silva, W. A.: 128, 129  
 Silvati, L.: 821  
 Silverman, E. M.: 223, 272  
 Simmons, G. A.: 158, 159  
 Simonsen, L. C.: 905, 906, 912, 914  
 Simpson, J. O.: 313, 354, 421  
 Simpson, J. W.: 304, 305, 310  
 Singh, D. J.: 452  
 Singh, H. B.: 544, 545  
 Singh, J. J.: 470, 473  
 Singh, U. N.: 877, 878, 879  
 Singleton, J. D.: 71  
 Sisk, D. B.: 288, 306  
 Siskind, D. E.: 591  
 Situ, W.: 563  
 Skeens, K. M.: 651  
 Sleight, D. W.: 523  
 Smith, A.: 470, 473  
 Smith, B. F.: 696  
 Smith, B. T.: 824  
 Smith, G. L.: 610, 645, 648, 656  
 Smith, J. G., Jr.: 313, 324, 325, 326, 327,  
     334, 335, 355, 782, 783  
 Smith, M. A.: 841, 842, 843, 844, 845, 846,  
     849, 850, 851  
 Smith, R. C.: 733, 737, 738, 751  
 Smith, S. A.: 307  
 Smith, S. W.: 273  
 Smith, W. L., Jr.: 621, 636, 637, 639, 640,  
     641, 649, 650, 659, 660  
 Sneddon, M. D.: 821  
 So, R. M.: 460  
 Sobel, L.: 271  
 Sobieszczański-Sobieski, J.: 130  
 Soemarwoto, B.: 453  
 Solomon, S.: 443  
 Soloway, D. I.: 720, 724  
 Somani, A. K.: 702, 703, 704  
 Song, K. D.: 135  
 Southward, R. E.: 356, 357, 358, 359, 360,  
     361  
 Spamer, G. T.: 808  
 Sparks, D. W., Jr.: 198  
 Spel, M.: 439  
 Spencer, D. A.: 173  
 Speziale, C. G.: 454  
 Splettstoesser, W. R.: 838  
 Sprinkle, D. R.: 470, 473  
 St. Clair, A. K.: 316, 317, 330, 347, 350, 351,  
     352, 354, 356, 357, 358, 359, 360, 361,  
     363  
 St. Clair, T. L.: 346, 362  
 Stacy, K.: 456  
 Stalker, R. J.: 435, 436  
 Starke, E. A., Jr.: 308  
 Starnes, J. H., Jr.: 211, 212, 233, 508, 515,  
     519, 524, 525, 526, 532  
 Steijl, R.: 439  
 Stewart, E. C.: 88  
 Stewart, S. H.: 903  
 Stiede, P. E.: 805  
 Stoakley, D. M.: 316, 317, 347, 352  
 Stocks, B. J.: 575, 576  
 Stouffer, S. D.: 138  
 Streett, C. L.: 408, 442, 472  
 Stuever, R. A.: 86, 88, 144  
 Subramanian, C. S.: 487  
 Sullivan, B. M.: 823, 831

- Summers, M. E.: 591  
 Sun, K. J.: 493  
 Sun, X-H.: 752  
 Sutherland, L. C.: 806  
 Sutter, T. R.: 353  
 Suttles, J. T.: 629  
 Sutton, M. A.: 289, 290, 302  
 Swain, M. H.: 296  
 Swanson, R. C., Jr.: 59, 92, 753, 826, 832  
 Swenson, D. V.: 291  
 Sze, N. D.: 594, 603
- T**
- Taghavi, R. R.: 25  
 Tai, H.: 670, 852, 905  
 Talay, T. A.: 169  
 Talbot, R. W.: 544  
 Talcott, N. A., Jr.: 384  
 Tam, C. K.: 833  
 Tang, T.: 81  
 Tanner, J. A.: 113  
 Tanner, S. E.: 836  
 Tapia, M. A.: 719  
 Tartabini, P. V.: 166  
 Tawari, S. N.: 140  
 Taylor, L. T.: 316, 352  
 Tcheng, P.: 474  
 Tessler, A.: 489, 490, 522  
 Thibeault, S. A.: 237, 905, 912  
 Thomas, G. E.: 581  
 Thomas, J. L.: 56  
 Thomas, R. H.: 781, 834, 835  
 Thomason, L. W.: 586, 592, 593  
 Thompson, D. S.: 356, 357, 358, 359, 360  
 Thompson, D. W.: 356, 357, 358, 359, 360,  
     361, 363  
 Thompson, R. E.: 567  
 Thornton, T. A.: 360  
 Tiemsin, P. I.: 376, 388  
 Tilgner, M.: 687  
 Tindell, R. H.: 131  
 Tishkoff, J. M.: 142  
 Titlow, J.: 608  
 Todhunter, R. G.: 304, 305  
 Torczon, V.: 725, 754  
 Tovinkere, V.: 608  
 Towell, T. W.: 344
- Townsend, L. W.: 853, 854, 908  
 Tracy, M. B.: 60  
 Trepte, C. R.: 592, 600  
 Trinidad, P. P.: 886  
 Tripathi, R. K.: 854, 910, 911  
 Tripp, J. S.: 474  
 Trivedi, K. S.: 686, 704  
 Trosset, M. W.: 754  
 Troutman, P. A.: 170, 185, 190  
 Trujillo, A. C.: 153  
 Tsou, H. T.: 257  
 Tsynkov, S. V.: 58, 61, 62  
 Tuck, A. F.: 587  
 Tucker, J. H.: 719  
 Turkel, E.: 59, 753, 832  
 Turner, T. L.: 825  
 Twohy, C. H.: 548
- U**
- Ueng, S-K.: 705  
 Ueno, T.: 668, 800  
 Unal, R.: 758  
 Upchurch, B. T.: 469, 487  
 Ustinov, M. V.: 432
- V**
- Vahala, G.: 461  
 Valero, F. P.: 621  
 Valla, R.: 466  
 Van Rosendale, J.: 680, 683  
 Vassey, F. S.: 385  
 Vatsa, V. N.: 62  
 Vaughan, R. M.: 173  
 Vaughn, M. R.: 769  
 Vaughn, T. P.: 288, 306  
 Vaughn, W. L.: 257  
 Vay, S. A.: 548  
 Vazquez, S. L.: 375  
 Veazie, D. R.: 230, 274  
 Venkat, V. S.: 232  
 Venkatakrishnan, V.: 14, 727  
 Venkatapathy, E.: 406, 416, 433  
 Vicroy, D. D.: 88  
 Vieira, G. J.: 456  
 Villani, J. A.: 8, 9

Vipavetz, K. G.: 385  
Virgin, L. N.: 818

## W

Wagner, A.: 33  
Wagner, J. A.: 288, 306  
Wallace, T. A.: 278, 279  
Wallio, H. A.: 542, 543, 548  
Walpot, L.: 439  
Walsh, B. M.: 865, 867, 868, 869, 870  
Walsh, J. L.: 63  
Wang, J. T.: 523, 527  
Wang, P-H.: 602, 651  
Wang, Y.: 170  
Warren, A. W.: 93  
Waszak, M. R.: 154, 155  
Waters, J. W.: 589  
Watson, W. R.: 836  
Weaver, S. P.: 634  
Webb, J. R.: 904  
Weikel, W. J.: 350  
Weilmuenster, K. J.: 416, 455  
Weinstein, L. M.: 456  
Weisenborn, M. D.: 594  
Weisenstein, D. W.: 603  
Weiser, E. S.: 339  
Welch, S. S.: 500, 501  
Weston, R. P.: 43  
Westphal, D. L.: 652  
Wheeler, R. J.: 627, 628, 647, 653  
White, J. J., II: 84  
White, N. H.: 171  
Whitesides, J. L.: 31  
Whitley, K. S.: 228, 837  
Whitlock, C. H.: 620, 623, 628, 629, 644,  
    647, 653, 654, 656  
Wiecek, M. M.: 730  
Wiedemann, K. E.: 419  
Wielicki, B. A.: 561, 605, 613, 614, 615, 625,  
    632, 643, 655, 658  
Wieseman, C. D.: 126, 127  
Wilber, A. C.: 656  
Wilbur, M. L.: 71  
Wilhite, A. W.: 64  
Wilkie, W. K.: 132  
Wilkinson, S. P.: 340, 364  
Wilkinson, S. P.: 19, 27, 45, 65

Willard, S. A.: 259, 260, 299, 309  
Williams, G. B.: 399  
Williams, J. R.: 662, 664, 665  
Williams, R. A.: 165  
Williams-Byrd, J. A.: 877, 878, 879  
Willis, P.: 313  
Willshire, K. F.: 134  
Wilmoth, R. G.: 20, 49, 66, 438, 492  
Wilson, J. W.: 237, 662, 663, 664, 665, 666,  
    669, 670, 852, 853, 905, 906, 907, 908,  
    909, 910, 911, 912, 913, 914  
Wilson, M. R.: 817  
Wilson, R. G.: 483  
Wilson, R. V.: 457  
Wincheski, R. A.: 292, 293, 304, 305, 310,  
    311  
Winfrey, W. P.: 242, 312, 759, 760, 761, 762,  
    763, 764  
Wing, D. J.: 12, 67, 68  
Wingrove, E. R., III: 3, 6, 7, 10  
Winker, D. M.: 595, 596, 597, 598, 599  
Winstead, E. L.: 575, 576, 578  
Wise, K. L.: 328  
Wise, S. A.: 880, 881, 882  
Wissel, V.: 391, 392  
Wong, T.: 611, 657, 658  
Wood, K. H.: 365, 366  
Wood, W. A.: 69, 70, 458, 755  
Woodard, S. E.: 200, 201, 204, 205, 528, 529,  
    530  
Woodell, G. A.: 467, 471  
Woods, D. C.: 600, 603  
Woods-Vedeler, J. A.: 531  
Worden, H.: 601  
Working, D. C.: 362

## X

Xue, T.: 313

## Y

Yager, T. J.: 105  
Yang, J. N.: 275  
Yasukawa, B.: 808  
Yeager, J. C.: 156, 157  
Yeager, W. T., Jr.: 71  
Yee, J. H.: 582

- Yetter, J. A.: 131  
Yeung, P. K.: 459  
Ying, S. X.: 57  
Yost, W. T.: 667, 668, 671, 778, 779, 800,  
837  
Young, D. F.: 615, 637, 638, 639, 640, 649,  
658, 659, 660  
Young, P. R.: 365, 366  
Young, R. D.: 526, 532  
Younis, B. A.: 785, 786  
Yu, J.: 808, 877, 878, 879  
Yu, Y. H.: 838  
Yuan, S. P.: 460  
Yue, G. K.: 579, 580, 594, 602, 603

## Z

- Zabora, R.: 231  
Zak, J. A.: 89, 661  
Zang, T. A.: 43  
Zasadil, S.: 591  
Zawodny, J. M.: 536, 557  
Zhang, H.: 730  
Zhao, W.: 302  
Zhou, Y.: 397, 398, 448, 449, 459, 461  
Zhuang, Y.: 752  
Zima, H.: 680, 683  
Zimmerman, D. C.: 199, 518  
Zuckerwar, A. J.: 806, 839

## **Organization Index**

### **Office of Director**

#### **Office of Director (A)**

77, 78, 158, 159, 397, 398, 402, 403, 409, 410, 412, 413, 414, 420, 422, 426, 432, 445, 446, 447, 448, 449, 453, 457, 459, 461, 672, 673, 674, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 701, 702, 703, 704, 705, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754

#### **Office of Education (AE)**

540, 887, 888, 889, 897, 898, 899, 900, 901, 902, 904

### **Airframe Systems Program Office**

#### **Aeronautics Systems Analysis Division (BA)**

81, 93, 102, 122, 377, 384

#### **High-Performance Aircraft Office (BC)**

131

### **Space and Atmospheric Sciences Program Group**

#### **Atmospheric Sciences Division (CA)**

441, 443, 488, 533, 534, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 841, 842, 843, 844, 845, 846, 849, 850, 851

#### **Space Systems and Concepts Division (CB)**

166, 167, 168, 169, 170, 171, 172, 173, 184, 185, 189, 190, 202, 464, 535, 756, 757, 758, 883, 884

#### **Space Projects Office (CC)**

186

## **Research and Technology Group**

### **Research and Technology Group (D)**

111, 130, 516, 716, 717

#### **Aero- and Gas-Dynamics Division (DA)**

5, 11, 12, 15, 17, 18, 20, 21, 22, 23, 25, 26, 28, 29, 30, 31, 38, 40, 44, 47, 48, 49, 51, 52, 60, 66, 67, 68, 69, 70, 97, 98, 99, 100, 103, 136, 137, 139, 140, 142, 160, 161, 164, 367, 396, 399, 400, 401, 405, 406, 415, 416, 417, 418, 423, 424, 433, 435, 436, 437, 438, 439, 440, 444, 455, 458, 492, 755

#### **Flight Dynamics and Control Division (DC)**

55, 72, 73, 74, 75, 76, 79, 80, 83, 84, 86, 87, 88, 89, 110, 112, 114, 115, 116, 117, 133, 134, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 162, 187, 188, 191, 192, 193, 194, 195, 196, 197, 198, 203, 373, 374, 496, 661, 720, 721, 722, 723, 742

#### **Fluid Mechanics and Acoustics Division (DF)**

13, 14, 19, 24, 27, 32, 35, 36, 37, 39, 41, 42, 43, 45, 46, 54, 56, 57, 58, 59, 61, 62, 63, 65, 92, 208, 297, 407, 408, 425, 427, 428, 429, 430, 442, 450, 451, 452, 454, 456, 460, 472, 475, 476, 477, 478, 479, 480, 484, 677, 678, 679, 711, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 780, 781, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 801, 803, 804, 805, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 838, 840, 847, 848, 856

#### **Flight Electronics Technology Division (DI)**

82, 90, 91, 165, 175, 176, 177, 178, 179, 180, 368, 369, 370, 371, 372, 375, 376, 379, 380, 381, 382, 383, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 467, 471, 482, 676, 700, 706, 708, 710, 712, 713, 714, 715, 718, 724

#### **Materials Division (DM)**

109, 135, 138, 141, 209, 213, 214, 215, 216, 217, 218, 219, 221, 222, 224, 228, 229, 230, 231, 232, 233, 234, 237, 238, 239, 240, 241, 242, 243, 244, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 263, 264, 265, 266, 267, 270, 271, 273, 274, 275, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 346, 347, 348, 349, 350, 351, 352, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 481, 494, 499, 520, 619, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 759, 760, 761, 762, 763, 764, 778, 779, 782, 783, 800, 824, 837, 852, 853, 854, 873, 880, 881, 882, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916

## **Structures Division (DS)**

1, 2, 16, 71, 94, 95, 101, 104, 105, 106, 107, 113, 118, 119, 120, 121, 123, 124, 125, 126, 127, 128, 129, 132, 163, 199, 200, 201, 204, 205, 210, 211, 212, 223, 225, 226, 227, 235, 236, 245, 246, 262, 268, 269, 272, 277, 315, 331, 345, 353, 404, 419, 421, 489, 490, 495, 497, 498, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 517, 518, 519, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532

## **Technology Applications Group**

### Technology Applications Group (E)

207, 493, 885

## **Internal Operations Group**

### Facility Systems Engineering Division (GG)

206

### Experimental Testing Technology Division (GH)

411, 462, 463, 466, 468, 469, 470, 473, 474, 487, 806, 839

### Aerospace Mechanical Systems Division (GK)

96, 181, 182, 183, 276, 431, 491

### Aerospace Electronic Systems Division (GL)

85, 378, 385, 465, 483, 486, 536, 537, 538, 539, 541, 570, 675, 719, 855, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 874, 875, 876, 877, 878, 879

### Information Systems and Services Division (GM)

434, 485, 707, 709, 886, 890, 891, 892, 893, 894, 895, 896, 903

## **High-Speed Research Program Office**

### High-Speed Research Program Office (I)

64

## **Advanced Subsonic Technology Program Office**

### Advanced Subsonic Technology Office (KC)

3, 4, 6, 7, 8, 9, 10, 220, 802

**Aerospace Transportation Technology Office**

Aerospace Transportation Technology Office (L)

108

Hyper X Program Office (LA)

33, 34, 50, 53

**Independent Program Assessment Office**

Independent Program Assessment Office (M)

174

## **RTOP Index**

RTOP 146-90-04	549, 564, 571, 572, 573, 574, 575, 576, 577, 578, 621, 636, 640, 641, 649, 650	RTOP 233-01-21	509
RTOP 148-65-41	607, 609, 611, 612, 613, 614, 620, 622, 625, 626, 627, 628, 629, 632, 643, 644, 647, 653, 655, 656, 657, 658	RTOP 233-02-03	350, 354, 356, 357
RTOP 199-45-16	662, 663, 664, 665, 666, 669, 852, 854, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914	RTOP 233-03-01	187
RTOP 225-12-02	431	RTOP 233-03-03	375
RTOP 227-92-43	465	RTOP 233-10-14	196, 197, 198, 321, 330, 361, 470, 496, 505
RTOP 229-01-02	605, 606, 610, 615, 630, 631, 633, 637, 648	RTOP 233-10-21	205
RTOP 229-02-06	601	RTOP 233-20-21	223, 272, 860, 862, 864, 865, 866, 867, 868, 870, 875
RTOP 229-10-32	552	RTOP 233-20-24	467
RTOP 229-71-02	533	RTOP 233-30-31	869
RTOP 232-01-04	51	RTOP 233-40-41	313
RTOP 233-01-01	237, 510, 529, 882	RTOP 236-04-70	181
		RTOP 237-02-22	186

RTOP 237-03-02		423, 424, 433, 437, 438, 439, 440, 444, 455, 458, 492, 755, 758
500		
RTOP 237-03-33		RTOP 243-10-01
200, 201		885
RTOP 237-08-02		RTOP 243-30-07
501		668
RTOP 242-03-30		RTOP 243-50-01
263, 824		207
RTOP 242-20-02		RTOP 258-20-00
315		675
RTOP 242-20-07		RTOP 258-70-21
135, 353		180, 395, 471, 483, 486, 536, 570, 719, 859, 861, 863, 872, 877, 878, 879
RTOP 242-20-08		RTOP 260-30-15
40, 166, 168, 169, 400, 417		283
RTOP 242-30-03		RTOP 260-98-09
173		184
RTOP 242-30-05		RTOP 267-10-00
306		185
RTOP 242-30-33		RTOP 274-00-96
172		473, 482, 488, 724
RTOP 242-33-01		RTOP 274-00-97
171, 264, 331, 419, 915, 916		394, 464, 535, 562, 563, 720
RTOP 242-50-02		RTOP 282-10-01
288		77, 78, 402, 403, 432
RTOP 242-80-01		RTOP 282-10-08
5, 11, 17, 18, 20, 44, 47, 48, 49, 66, 69, 70, 396, 399, 401, 405, 406, 415, 416,		540

RTOP 297-40-00		RTOP 464-54-07
302		541
RTOP 297-50-00		RTOP 464-54-11
182, 183, 491, 855		544
RTOP 297-90-00		RTOP 505-10-31
174		111
RTOP 323-78-01		RTOP 505-59-10
499		37
RTOP 344-16-50		RTOP 505-59-30
582		22, 23, 68
RTOP 370-21-08		RTOP 505-59-36
553, 554, 555		97, 103
RTOP 413-18-07		RTOP 505-59-50
569		19, 35, 38, 46, 450, 451, 454
RTOP 428-82-00		RTOP 505-59-52
608, 623, 654		771, 772, 775, 776, 777, 785, 815, 829
RTOP 460-44-41		RTOP 505-59-53
638, 651, 652		14, 30, 59, 767, 768, 799, 816, 826, 832, 836
RTOP 464-12-03		RTOP 505-59-54
538, 539		411, 856
RTOP 464-23-08		RTOP 505-63-10
845, 850		106, 217
RTOP 464-34-02		RTOP 505-63-35
590		512
RTOP 464-51-01		RTOP 505-63-36
443		71, 120, 123, 132, 262, 677, 803, 817

RTOP 505-63-50		RTOP 505-90	
43, 105, 107, 113, 118, 124, 126, 206, 209, 211, 219, 230, 234, 235, 240, 246, 274, 286, 314, 318, 320, 322, 323, 327, 329, 334, 336, 338, 339, 340, 343, 344, 355, 365, 498, 503, 514, 515, 619, 770, 791, 813, 814		887, 888, 889, 897, 898, 899, 900, 901, 902, 904	
RTOP 505-63-53		RTOP 505-90-52	
495, 521		397, 398, 409, 410, 412, 413, 414, 420, 422, 426, 445, 446, 447, 448, 449, 453, 457, 459, 461, 672, 673, 674, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 701, 702, 703, 704, 705, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754	
RTOP 505-63-87		RTOP 506-43-11	
224		779	
RTOP 505-64-13		RTOP 506-63-50	
144		332	
RTOP 505-64-50		RTOP 509-10-11	
706		54, 63, 711	
RTOP 505-64-52		RTOP 509-10-31	
112, 175, 192, 376, 721, 723		130	
RTOP 505-64-70		RTOP 510-02-12	
374		268	
RTOP 505-68-30		RTOP 519-20-21	
55, 60, 96, 110		462, 463, 466, 468, 469, 474, 487, 848	
RTOP 505-70-59		RTOP 519-30-21	
847		369, 370, 371	
RTOP 505-70-62		RTOP 519-30-31	
26, 418		714, 718	
RTOP 505-70-63			
50, 277			
RTOP 505-70-69			
150			

RTOP 519-50-11	
710	RTOP 522-24-21
RTOP 522-11-21	82, 176, 373, 377, 384, 388, 389
828, 830	RTOP 522-25-31
RTOP 522-11-41	15, 25, 146
212, 236, 381, 386, 387, 508, 519	RTOP 522-31-11
RTOP 522-11-51	24, 27, 32, 36, 45, 65, 425, 428, 456, 840
39, 408	RTOP 522-31-21
RTOP 522-12-11	13, 56, 57, 58, 61, 62, 208, 460, 489, 490, 502, 516, 773, 798, 833
278, 279, 285, 287	RTOP 522-31-31
RTOP 522-13-21	41
778	RTOP 522-31-41
RTOP 522-14-11	42, 407
133, 134, 143, 153	RTOP 522-31-51
RTOP 522-14-21	52, 161
165, 393, 700, 712, 715	RTOP 522-31-61
RTOP 522-14-31	429, 442
84, 385	RTOP 522-31-81
RTOP 522-21-11	427
12, 67	RTOP 522-32-11
RTOP 522-21-31	215, 228, 231, 325, 326, 328, 342, 346, 366, 716, 717, 800, 837
156, 157	RTOP 522-32-21
RTOP 522-22-21	1, 2, 94, 95, 101, 104, 119, 127, 128, 780
16, 115, 116, 117, 125, 129, 152, 163	RTOP 522-32-31
RTOP 522-24-11	792, 795
316, 317, 347, 351, 352, 358, 359, 360	RTOP 522-32-41
	517

RTOP 522-33-11		RTOP 537-06-33
90, 91, 151, 154, 155, 177, 178, 179, 188, 191, 193, 194, 203, 380, 382, 383, 676, 708, 722		229, 242, 273
RTOP 522-41-11		RTOP 537-06-34
122		522
RTOP 522-51-11		RTOP 537-06-37
33, 34		794, 825
RTOP 522-51-21		RTOP 537-07-22
53		92
RTOP 522-51-31		RTOP 537-07-24
136, 137, 138, 139, 140, 141, 142, 160, 367, 435, 436, 452		114
RTOP 522-51-61		RTOP 537-08-24
108		72, 162
RTOP 533-31-21		RTOP 537-09-20
786		64, 102
RTOP 537-02-22		RTOP 537-09-21
806		670, 793, 853
RTOP 537-05-21		RTOP 537-09-23
822		542, 543, 548
RTOP 537-06-21		RTOP 538-01-14
497		372, 713
RTOP 537-06-22		RTOP 538-02-10
818		109, 216, 221, 233, 244, 250, 251, 252, 253, 258, 259, 260, 270, 275, 280, 281, 282, 284, 289, 290, 291, 294, 295, 296, 298, 299, 300, 301, 303, 307, 348, 520, 524, 525, 526, 532
RTOP 537-06-31		RTOP 538-02-11
308		292, 293, 311, 312, 759, 760, 762, 763, 764

RTOP 538-03-11	
790, 796	
RTOP 538-03-12	
475, 476, 477, 478, 479, 480, 765, 766, 769, 781, 787, 802, 805, 807, 808, 834, 835, 839	
RTOP 538-03-13	
472, 819	
RTOP 538-03-14	
678, 679, 788, 797, 811, 812, 820, 823, 831	
RTOP 538-03-15	
801, 821	
RTOP 538-04-11	
79, 80, 83, 85, 86, 87, 89, 378, 391, 392, 661	
RTOP 538-04-13	
147, 148	
RTOP 538-04-14	
81, 93	
RTOP 538-05-12	
31	
RTOP 538-05-13	
21, 131	
RTOP 538-05-14	
28, 29	
RTOP 538-05-15	
430	
RTOP 538-07-11	
145, 149, 742	
RTOP 538-07-14	
513, 804	
RTOP 538-07-15	
810	
RTOP 538-07-19	
73, 74, 75, 76	
RTOP 538-07-22	
4	
RTOP 538-08-11	
3, 6, 7, 8, 9, 10	
RTOP 538-08-12	
634, 635, 639, 642, 659, 660	
RTOP 538-10-11	
210, 213, 214, 220, 222, 243, 245, 249, 261, 266, 269, 271, 309, 504, 511, 523, 527, 761	
RTOP 538-13-11	
232	
RTOP 548-10-11	
88	
RTOP 548-10-31	
857, 858, 871	
RTOP 548-10-41	
379	
RTOP 578-12-25	
604, 616, 617, 645, 646	

RTOP 578-12-70		RTOP 622-63-08	
624		545	
RTOP 579-21-17		RTOP 622-63-13	
565, 584		547	
RTOP 579-21-51		RTOP 622-67-65	
583		841, 842, 843, 844, 846, 849, 851	
RTOP 581-01-21		RTOP 622-67-69	
238		567, 588	
RTOP 581-10-11		RTOP 632-10-14	
98, 99, 100, 484		195, 481, 518, 530	
RTOP 581-10-21		RTOP 632-20-21	
218, 239, 241, 247, 248, 254, 255, 256, 265		204, 257, 506, 507, 528, 531, 881	
RTOP 581-20-21		RTOP 665-25-06	
121, 774, 789, 838		550	
RTOP 581-20-31		RTOP 665-25-30	
784, 809, 827		441	
RTOP 591-22-21		RTOP 665-25-31	
345		551, 566, 581, 585, 587	
RTOP 618-22-31		RTOP 665-25-41	
558		560, 561	
RTOP 622-56-61		RTOP 665-45-20	
534		556, 557, 579, 580, 586, 592, 594, 595, 596, 597, 598, 599, 600, 602, 603, 618	
RTOP 622-63-02		RTOP 665-45-53	
546		593	
RTOP 622-63-06		RTOP 665-70-01	
537		559, 568, 589, 591	

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188
<p>Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.</p>			
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED	
	February 1998	Technical Memorandum	
4. TITLE AND SUBTITLE		5. FUNDING NUMBERS	
NASA Langley Scientific and Technical Information Output—1997			
6. AUTHOR(S)			
Susan H. Stewart and Harriet B. Machie, Compilers			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)		8. PERFORMING ORGANIZATION REPORT NUMBER	
NASA Langley Research Center Hampton, VA 23681-2199		L-17714	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
National Aeronautics and Space Administration Washington, DC 20546-0001		NASA/TM-1998-206936	
11. SUPPLEMENTARY NOTES			
12a. DISTRIBUTION/AVAILABILITY STATEMENT		12b. DISTRIBUTION CODE	
Unclassified—Unlimited Subject Category 82 Distribution: Nonstandard Availability: NASA CASI (301) 621-0390			
13. ABSTRACT (Maximum 200 words) This document is a compilation of the scientific and technical information that the Langley Research Center has produced during the calendar year 1997. Included are citations for Formal Reports, Conference Publications, High-Numbered Technical Memorandums, Contractor Reports, Journal Articles and Book Publications, Meeting Presentations, Technical Talks, and Patents.			
14. SUBJECT TERMS		15. NUMBER OF PAGES	
Bibliographies; Scientific and technical information; Documentation; Indexes		156	
		16. PRICE CODE	
		A08	
17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	

**RTOP 859-00-00**

167

**RTOP 906-43-00**

170, 189, 190, 756, 757

**RTOP 956-17-00**

873, 880

**RTOP 963-35-00**

368

**RTOP 963-89-00**

199, 202, 883, 884